

A NEW SPECIES OF *HAPLAXIUS*, WITH  
A KEY TO CALIFORNIA SPECIES

(Homoptera: Cixiidae)

R. A. FLOCK

*University of California Citrus Experiment Station, Riverside*

The genus *Haplaxius* was erected by Fowler (1904) for two Mexican species. Later, Caldwell (1946) pointed out that this name should also be applied to the species which had been included in the genus *Myndus* Stål in American literature. Caldwell includes 28 species in the genus, two of which were described from California. A third California species is described in this paper. It is one of the most distinctively marked species of the genus.

*Haplaxius gabrielensis* Flock, new species

Similar to *mojavensis* (Ball), but with basal and subbasal bands on the elytra, and lateral margins of frons more broadly expanded.

*Female*: Vertex slender, narrower at apex than at base. Frons 2.6 times as wide at apex as at base (0.19 : 0.50 mm.), wider than long (0.62 : 0.59 mm.), with a slight median carina. Pronotum two-thirds as long as eyes, and deeply, angularly emarginate posteriorly. Elytral nervures heavily setigerous; the cubitus forking far back, forming a cell only twice as long as broad; stigma cell almost semicircular.

Color, dark above and paler below. Vertex dark. Frons brownish with indication of black inside the base of the lateral carinae. Clypeus with disc brown, darker on sides. Pronotum pale with dark-brown areas behind the eyes. Mesonotum pale posteriorly, with a small dark area outside the carinae, and a large dark area on anterior half between the carinae. Elytra light, with basal dark band extending to apex of mesonotum, subapical dark band within basal third of elytra, apical third dark except for five transparent areas extending basally along some of the veins; part of apical veins white. Length, 4.12 mm.

*Male*: Dark areas considerably reduced, both in size and in intensity. Pygopher longer than wide, posterior ventral margin excavated in middle, with a short, broad, median process having a triangular apex reaching to the broadened apical portion of the style. Anal segment short, broad; ventral side concave, forming a hood over the genital capsule; telson dorsal. Styles boot-shaped, inner angle rounded, outer angle and apex truncate. Aedeagus in ventral view

with one large apical spine and a small subapical spine curving towards the anterior, and one smaller subapical spine curving in a posterior direction; in lateral view with large, erect ventral spine extending in an anterior direction. Length, 4.0 mm.

*Holotype* female, *allotype* male, and 14 *paratypes* taken from Our Lord's Candle (*Yucca whipplei* Torr.), SAN GABRIEL MTS., CALIFORNIA, at 4500 feet, July 10, 1950 (R. A. Flock). Types in author's collection. Paratypes to be placed in the collections of the University of California at Berkeley and at Riverside, in the United States National Museum, and in the Snow Collection at the University of Kansas.

#### HAPLAXIUS MOJAVENSIS (Ball)

*Myndus mojavensis* Ball, 1933 Jour. Wash. Acad. Sci. 23:480.

The types were collected at Mojave, California, on Joshua tree (*Yucca brevifolia* Engelm.) by E. D. Ball. I have since taken it in the San Jacinto Mts., California, Sept. 29, 1948, on *Agave deserti* Engelm. The specimens were compared with the type by David A. Young of the Division of Insect Identification, Bureau of Entomology and Plant Quarantine, United States Department of Agriculture.

#### HAPLAXIUS OCCIDENTALIS (Van Duzee)

*Myndus occidentalis* Van Duzee, 1914, Trans. San Diego Soc. Nat. Hist. 2:39.

This species appears to be fairly widespread in southern California. It is usually found in damp places in washes, on grasses and sedges. Several of the specimens were also taken on *Baccharis viminea* DC. The type locality is Lakeside, California, May, 1913; Van Duzee, collector. It has been taken on a sticky board hung in a citrus tree April 25 to May 9, 1947 (R. C. Dickson), during an investigation of possible vectors of "quick decline", a virus disease of citrus.

#### Key to Reported California Species

- A. Elytra with definite markings between the veins.
  - B. Elytra with markings at apex.....*mojavensis*
  - BB. Elytra with basal and subbasal dark bands
    - and apical markings.....*gabrielensis*
- AA. Elytra without definite markings between the veins.....
  - .....*occidentalis*

## LITERATURE CITED

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1904. *Biologia Centrali-Americana*. Hemiptera-Homoptera.  
1:97-8, pl. 10.

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## NOTE ON THE SWARMING OF BRACHYMYRMEX SP.

(Hymenoptera: Formicidae)

On the evening of August 15, 1950, between 6:35 and 7:05 p.m. (Pacific daylight saving time), above the lawn on the south edge of the State Capitol Grounds at Sacramento, California, the writers observed large swarms of *Brachymyrmex* sp.<sup>1</sup> A swarm containing several thousands of the small males was first observed while looking into the direction of the sun. The central mass of the swarm was about four feet in diameter and occupied a space from about three to eight feet above the ground. Small masses of males would at times increase the speed of their frenzied dance and would form small cylinders of blurred wings and bodies which would move up and away from the larger body and after a few seconds return to the slower moving swarm. After the discovery of the first swarm an examination of the place revealed that over an area of lawn of at least 100 by 100 feet there were four additional swarms of males in flight in addition to numerous flying individuals filling the entire area. One of these swarms reached a height of approximately fifteen feet. Occasionally smaller numbers of the ants would form several small cylinders as noted above. Some males and females were noted crawling about in the grass. A few females were seen flying about and were not intimately associated with the main swarms of males. A section of shaded lawn separated from the above mentioned area by a row of trees also contained at least one large swarm which was more difficult to see because of the lack of sun due to surrounding trees. Still another swarm of *Brachymyrmex* was observed at the opposite north end of the grounds. In an adjoining fountain many hundreds of fallen specimens were observed on the surface of the water where they could not escape. Meteorological conditions: still air, bright sunlight, temperature 97 degrees F.

—P. H. ARNAUD and L. W. QUATE.

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<sup>1</sup>Determined by M. R. Smith, U. S. National Museum.